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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/657,719	09/08/2000	Kevin E. Mahaffy	AAI-002	2832

7590 10/03/2002  
David P Gordon Esq  
65 Woods End Road  
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EXAMINER

CUFF, MICHAEL A

ART UNIT	PAPER NUMBER
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3627

DATE MAILED: 10/03/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/657,719

Applicant(s)

Mahaffy et al.

Examiner

Michael Cuff

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— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Aug 31, 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above, claim(s) 43-48 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2 6) ☐ Other:

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## **DETAILED ACTION**

### ***Election/Restriction***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-42, drawn to a method and apparatus for an AI voice recognition, human feedback, POS system.
  - II. Claims 43-48, drawn to the method of generating and animating a character.
2. Inventions of group I and group II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention of group II has separate utility such as a toy. See MPEP § 806.05(d).
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with David Jacobson on 9/27/02 a provisional election was made without traverse to prosecute the invention of group I, claims 1-42. Affirmation of this election must be made by applicant in replying to this Office action. Claims 43-48 are withdrawn

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from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).

#### ***Claim Objections***

6. The dependent method claims are objected to because many of them are written as apparatus claims. For example, claim 21 recites, "said interactive terminal is adapted to elicit a restaurant food order" This limits the apparatus of the interactive terminal, not the method of processing a commercial transaction. This could written as -- said step of eliciting a verbal instruction is adapted for eliciting a restaurant food order.--

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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8. Claims 20-42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The method steps are replete with unclear mixed limitations, some examples are:

Claim 20, step c), recites “upon verbal instructions”. There is a verb missing. It appears that it should read --upon receiving verbal instruction--.

Claim 20, step d), recites “upon determining a problem in said processing, having a human intervene to process the verbal instruction.”. It is not clear who determined that there was a problem. Is it the AI or the human that made this determination? The specification, on page 22, recites that it could be the AI by “probabilistic calculation” or the customer.

In addition, the action of intervening is the actual process step in step d), not “having a human” which may not even be patentable subject matter. This becomes even more important when claim 29 recites that “the human is located off-premises”, when it should be the step of intervening is performed off-premises.

By keeping the grammar and format consistent, the claims will be much more clear.

Claim 32 is missing a verb between human support and “at least one of ...”.

Claim 34 recites that “said providing real-time human support is substantially seamless, ...” This is not true, providing human support is a discrete action, not “seamless”. The lack of clarity

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comes from the recurring problems of the claims not being consistent and mixing apparatus limitations with method limitations. In this case, claim 33 should have recited the method of -- establishing communications between the human support and the customer.--. Then claim 34 would make sense as --the step of establishing communication is substantially seamless, such that ...--.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-3, 8-14, 17, 20, 22-25, 27-29, 31-36, and 39-41 are rejected under 35 U.S.C.

102(b) as being anticipated by Schneider (5,083,638).

Schneider shows, figures 1 and 2, an automated point-of-sale machine. The robot module (first CIT), as shown in figure 1, has a microphone 13 (adapted to receive the verbal instructions and provide an audio signal), a video display terminal (video confirmation, details of transaction), and a speaker system 12 (audio confirmation). Buttons 1 to 10 are for the consumer to communicate with the robot module. Column 6, line 48-51 recites that the buttons 1 to 10 can be replaced by other means of user interfaces, one of these could be a voice recognition circuitry (AI system recognizing verbal instructions, integral with first CIT, provides responsive feedback).

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Apparatus to process means of payment can be built into the robot module (column 10, lines 4-8) (first CIT includes a payment system including a currency reader) There is also video cameras 18/32 and a printer (not shown, but part of the payment system.). The supervisor module (human controlled response system in communication with the first CIT, remotely located, can be off premises), as shown in figure 2, allows a store employee to supervise the operation of the robot module. Operator keyboard 57 is the input device for control of the robot module (override capability). The supervisory employee may be expected to enter a code or to approve a product number chosen by the consumer. (These functions are seamless and the customer may not be aware of these actions.)

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 4-7, 15-16, 18-19, 21, 26, 30, 37-38 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schneider.

Schneider shows all of the limitations of the claims except for specifying specific video display animations, characters or advertisements; restaurant applications; the use of VoIP; and

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specific communications between computers (ie wireless or computer A communicates to computer B).

The examiner takes official notice that the video displays, applications, protocols, and communication connections are well known in the art and that one of ordinary skill in the art would make use of these standard items in order to take advantage reliable off-the-shelf items.

Based on the discussion above, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify Schneider system to incorporate specific video display animations, characters or advertisements; restaurant applications; the use of VoIP; and specific communications between computers (ie wireless or computer A communicates to computer B) in order to take advantage reliable off-the-shelf items.

### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Immarco et al. show speech recognition devices, some related to POSs with characters of interest. Marcus et al. shows the use of VoIP of interest. Schneider (5,125,465) shows a POS of interest. Akers et al. shows an AI system with human intervention of interest..

14. Any inquiry concerning this communication should be directed to Michael Cuff at telephone number (703) 308-0610.



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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1113. The fax phone number for this Group is (703) 872-9326. (After Final special fax number (703) 872-9327) The customer service number is (703) 872-9325.

*Michael Cuff 9/27/02*

Michael Cuff  
September 27, 2002